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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,890	05/26/2000	RYOUMEI OMOTE	00177/530850	2420

7590 12/10/2003

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WASHINGTON, DC 20006

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

cb/b

Office Action Summary

Application No.

09/486,890

Applicant(s)

OMOTE ET AL.

Examiner

Andrew T Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-55 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☒ Claim(s) 46,48 and 50 is/are allowed.
- 6) ☒ Claim(s) 16,19,21,23,26,28,30,32,33,36,38,40,42,44,45,52 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☒ Interview Summary (PTO-413) Paper No(s). 15.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 17,18,20,22,24,25,27,29,31,34,35,37,39,41,43,47,49,51,53 and 55.

DETAILED ACTION

Drawings

1. The drawings were received on 10/15/2003. These drawings are accepted by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,225,273 to Mikoshiba et al. (hereinafter referred to as Mikoshiba) in view of Applicant's Disclosure.

Regarding claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54, Mikoshiba discloses that it is known in the art of touch panels (column 1, lines 14-23) to form an ITO transparent conductive electrode film by sputtering at a film formation temperature of 100 to 150C followed by aging performed at a temperature of around 150C (column 9, line 32 through column 10, lines 64).

Considering that the ITO transparent conductive electrode film taught by Mikoshiba is formed by a substantially identical method compared to the method utilized by the current applicant (see Examples 1-4 on pages 38-46 of the current specification), it appears that the ITO electrode of Mikoshiba possesses the claimed surface roughness properties.

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The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Mikoshiba does not mention the a specific touch panel structure, but the current applicant discloses that a typical resistor-film analog type transparent touch panel has a lower electrode and an upper electrode stacked so as to be spaced from each other by spacers, the transparent conductive film being provided on an electrode substrate of at least one of the electrodes forming the electrode and thereby forming the electrode (see page 2, lines 11-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the touch panel structure disclosed by the current applicant, as the touch panel structure of Mikoshiba, because the touch panel structure disclosed by the current applicant is a typical resistor-film analog type transparent touch panel structure.

Regarding claims 28, 30 and 32, considering the substantially identical ITO film of Mikoshiba, compared to the ITO film claimed by the current applicant, it is the examiner's position that the film of Mikoshiba is identical to or only slightly different than the claimed film prepared by the method of the claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The

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patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show obvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983). Mikoshiba either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the Mikoshiba.

4. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikoshiba in view of Applicant's Disclosure as applied to claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 above, and further in view of USPN 5,411,792 to Yukinobu et al. (hereinafter referred to as Yukinobu).

Mikoshiba discloses the use of an ITO transparent conductive film, but does not mention the use of a fluorine or antimony doped tin oxide film. Yukinobu discloses that both ITO and antimony doped tin oxide layers (ATO) are used to form transparent electrodes for liquid crystal display panels (column 1, lines 6-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the transparent electrode of Mikoshiba from either ITO or ATO, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

Allowable Subject Matter

5. Claims 46, 48 and 50 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest a method of fabricating a transparent conductive film for use in a transparent touch panel comprising coating or printing with a sol-gel material, performing a drying process, then an oxidation burning process at a temperature increasing rate of 40-60C per minute within a temperature range of 200-400C, followed by a reduction burning process.

Response to Arguments

7. Applicant's arguments filed 10/15/2003 have been fully considered but they are not persuasive.

The applicant asserts that Mikoshiba fails to teach or suggest the currently claimed arithmetic mean roughness and root-mean-square roughness. The examiner respectfully disagrees. Mikoshiba discloses that it is known in the art of touch panels (column 1, lines 14-23) to form an ITO transparent conductive electrode film by sputtering at a film formation temperature of 100 to 150C followed by aging performed at a temperature of around 150C (column 9, line 32 through column 10, lines 64). Considering that the ITO transparent conductive electrode film taught by Mikoshiba is formed by a substantially identical method compared to the method utilized by the current applicant (see Examples 1-4 on pages 38-46 of the current specification), it appears that the ITO electrode of Mikoshiba possesses the claimed arithmetic mean roughness and root-mean-square roughness.

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Mikoshiba also discloses (see the entire document including the paragraph bridging columns 3 and 4) that the ITO transparent conductive electrode may comprise crystal grain aggregates. Considering that the current applicant discloses that the presence of crystal grain aggregates is responsible for the currently claimed arithmetic mean roughness and root-mean-square roughness (see specification page 19, line 23 through page 20, line 7), it strongly appears that the ITO electrode of Mikoshiba possesses the claimed arithmetic mean roughness and root-mean-square roughness.

The applicant has failed to show that the article taught by the prior art does not possess the claimed arithmetic mean roughness and root-mean-square roughness.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

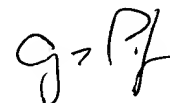
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (703) 306-0145. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

atp



ANDREW T. PIZIALI
PATENT EXAMINER



DEBORAH JONES
SUPERVISOR PATENT EXAMINER